



Missouri State Recycling Program

Office of Administration | General Services | 573-751-3384

RECYCLED MATERIAL FINDS NEW LIFE

Placing material in a recycling container is the first gear in a complicated machine. After material is placed in a bin, where does it go? What does it become? When we cannot see the full machine at work it can be difficult to understand the complete cycle of recycling. Another effect of not being able to see the complete picture may be that we don't trust that material recycled at work is actually being recycled.

State team members recycle a LOT of material each year. The Missouri State Recycling Program (MSRP) has contracts with entities entrusted with taking this material from state buildings. From paper to cardboard, to old electronics, a wide range of items and materials are collected from state facilities each day.

When the MSRP sent out its biannual recycling survey last year, one of the most frequent questions in the comments was — what happens to the material recycled in state facilities? To answer this question, we reached out to the Jefferson City recycling services contractor to learn more about what happens to paper and cardboard collected in state facilities.

After state team members place paper and cardboard in recycling containers, it is picked up by the contractor and hauled to their Jefferson City facility. The material is sorted, baled, and ultimately shipped to mills in the United States.

In years past, material collected was sent to mills in Mexico to be processed.



Gary Burlingame, of the Department of Revenue, finishes filling two recycle bins of paper.

However, due to increased domestic demand, paper collected at state facilities is now being shipped to U.S. mills to manufacture products such as toilet paper and paper towels.

Cardboard and some of the paper collected at state facilities is also shipped to U.S. mills to manufacture "liner board" (the flat facings of corrugated cardboard) and "cardboard medium" (the corrugated material between the two flat facings). After these two materials are produced at mills, they are combined at a post-processing facility to make corrugated cardboard.

State team members play an important part in closing the recycling loop. By providing raw materials to U.S. based manufacturers, we are supporting the domestic recycling industry and insuring there is an adequate supply of products we all use every day.

MARCH 2022

EARTH DAY EVENTS STATE PARKS RECYCLE

The Department of Natural Resources is continuing their efforts to increase recycling at state park campgrounds by making it more convenient for campers to recycle.

This past year marked the first full year of operation for the Recycle Rally. Out of the 39 Missouri State Parks that offer camping, 41 percent (16 total) participated in the rally. During the summer peak season, monthly trash volume was reduced by the equivalent of one full 48-foot tractor trailer load.

MORA VIRTUAL SHOWCASE

The Missouri Recycling Association (MORA) is celebrating Earth Day by showcasing acts of stewardship and those investing their time and talent for a healthier planet.

Click [here](#) for showcase information.

Friday, April 22, 2022
9:00-11:00 a.m., or 1:00-3:00 p.m.

For a sneak preview of what state team members and agencies are doing to honor Earth Day, click [here](#).

Meet Your Recycling Committee Member KRISTIN ALLAN TIPTON

Kristin Allan Tipton is inspired with ideas that transform trash into useful items. Kristin manages two programs within the Missouri Environmental Improvement and Energy Resources Authority's (EIERA). These programs include the Market Development Program and Brownfield Revolving Loan Fund. Her experience managing these programs, along with her former experience as a state parks superintendent, have provided Kristin with extensive knowledge of the importance of recycling and reuse. For 22 years, Kristin has also been a devoted Missouri Interagency Recycling Committee (MIRC) member.

EIERA is a governor-appointed bipartisan quasi-governmental finance agency linked to the Missouri Department of Natural Resources (DNR). The Missouri Market Development Program (MMDP) promotes the development of markets for recovered materials and recycled content products throughout Missouri while the Brownfield Loan Fund helps communities cover the costs of the disposing of harmful chemicals and waste from contaminated real estate properties.

"I am frequently alarmed by the amount of waste we, as a culture, generate, and



Kristin Allan Tipton

am inspired when an entrepreneurial spirit figures out some way to convert what was once considered garbage into something useful. I also enjoy the parallels of working with projects to repurpose real estate that might also have once been considered trash," Kristin said.

EIERA has issued almost \$3 billion in private activity bonds for pollution control and has sold more than \$2.6 billion in bonds to support communities with water and wastewater infrastructure through the Missouri State Revolving Fund Loan Program (<https://eiera.mo.gov/>

state-revolving-fund). Through Kristin's leadership, the EIERA has provided more than \$3 million for cleanups at contaminated properties and has awarded more than \$13 million to manufacturers through the MMDP.

"EIERA was selected to house the MMDP to bridge the gap between economic development and environmental interests. The MMDP receives \$800,000 from the state Solid Waste Management fund annually and is a partnership between the EIERA, DNR, and Department of Economic Development," Kristin stated. "Although the MMDP works on the 'demand side' of recycling, focusing on the use of recovered materials rather than their collection, I think it is important that all of us in the recycling arena work together."

Kristin said that everyone at EIERA recycles what they can, which includes purchasing recycled-content when possible.

While doing her part in making sure sustainability and clean practices are adhered to, it all comes down to making sure we sustain our life support systems – our air, water, and land for future generations.

STATE HEALTH LAB UTILIZES CLOSED-LOOP RECYCLING PRACTICES

The State Health Lab is in the beginning stages of an onsite closed-loop recycling project. The idea was inspired during the pandemic when disruptions to the supply chain affected their ability to acquire certain plastic products.

By using a 3-D printer, the health lab is able to make a variety of plastic products and can design to their own specifications as necessary.

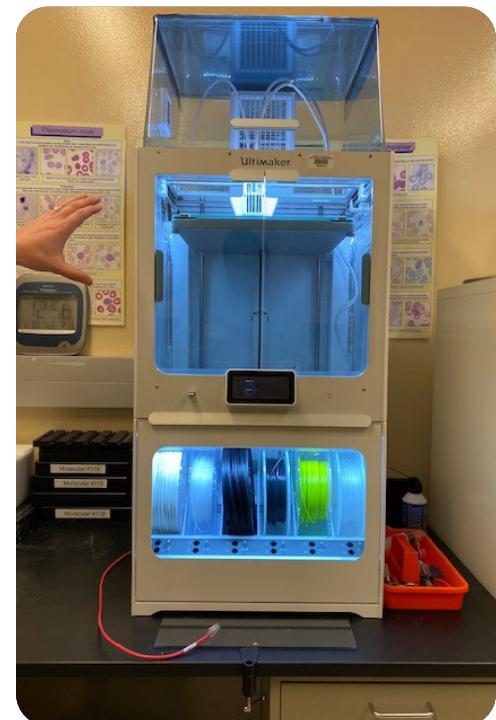
At present the Health Lab is using virgin plastics. However, they have been collecting used pipette containers to be used as a raw material for future 3-D printing of supplies needed at the lab. Once they are able to purchase equipment that allows them to grind and prepare the used plastic, they will be able to use this plastic to make supplies for the State Health Lab. In the recycling industry this would be described as a

closed-loop recycling process that will generate supplies made from 100 percent post-consumer material.

As this process matures, the lab hopes to become more self-sustaining by its ability to make certain supplies from scrap plastic.



(TOP) Plastic pipette boxes will be recycled to use the plastic in future object manufacturing.



(RIGHT) The health lab's 3-D printer can print objects that can then be utilized for lab purposes.



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HOW IS STATE E-WASTE RECYCLED?

Results from our biennial Missouri State Recycling Program (MSRP) survey last fall indicated that state team members wanted to know what happens to materials they recycle. What happens to your state-issued computers, laptops, and cell phones when they are no longer functional?

If you have visited the basement of the Harry S Truman State Office Building, you may have seen large pallets of electronic waste (e-waste). E-waste can range from appliances, electronics, and electrical items. In the Truman Building, state agencies drop off electronics in a designated area for recycling; however, electronics recycling is happening with state agencies throughout Missouri. To prepare the items for recycling, team members from the Information Technology Service Division (ITSD) remove all data from the equipment.

About once a month, Midwest Recycling Center (MRC) picks up pallets of electronics from the Truman Building to be recycled.

MRC operates as a R2v3-certified electronics recycler and collects material directly from state of Missouri entities to be properly recycled. Any asset tags are removed, and the electronics are evaluated for the presence of data to ensure that any data-bearing equipment undergoes data sanitization. Electronics are then demanufactured to the component level and materials separated such as circuit board, batteries, metal, and plastic. Once this material is separated



This pallet of e-waste, is ready to be recycled. MRC will take this pallet and recycle all components.

it is sent to downstream vendors to be smelted or further processed into raw materials that are made available for manufacturing new products.

MRC recycles computer-related equipment as well as appliances and other non-computer type equipment. MRC has a zero waste policy, which means that typically 10 percent or less of what MRC processes is sent to a landfill.

For further questions on what and how items are recycled visit the [MSRP website](#).

JUNE 2022

RECYCLING CHAMPION NOMINATIONS

If you know someone who meets the criteria below, please consider nominating them for a recycling champion award. Nominations may be for an individual or a team.

1. Is your nominee the office recycling champion?
2. Do they make sure your office or agency has products made from recycled materials?
3. Have they reduced waste for your agency?
4. Do they promote reuse? Are they an active user of the online application MOREuse?

Click [here](#) to nominate a recycling champion or team in this easy online form.

Please visit the Missouri State Recycling Program website for a complete list of award recipients. You can find the 2021 winners [here](#).

For questions about the nomination process do not hesitate to email the MSRP at Recycling@oa.mo.gov.

Meet Your Recycling Committee Member CHRIS TERRY

Chris Terry has been leading recycling efforts at the Missouri State Highway Patrol (MSHP) warehouse for the past 22 years. As the Senior Procurement Officer II, Chris oversees daily operations for the warehouse, print facility, and purchasing departments.

"When I started at the Patrol in 2000, the Jefferson City warehouse was starting to recycle items such as paper and cardboard from other Troop locations within the state. We slowly started to expand our efforts with the help of Rob Didriksen (Manager of the MSRP)," Chris stated.

Currently, the MSHP recycles used trooper and civilian uniforms, printer cartridges, paper, rechargeable & single-use batteries, car tires, wood pallets, plastic bottles, aluminum cans, scrap metal, vehicle oils & antifreeze, cardboard, and used cooking oil from the MSHP kitchen.

Chris soon was recognized as a leader in state government recycling, garnering a Recycling Champion award from the MSRP in 2017. Four years ago, he joined the Missouri Interagency



Chris Terry

Recycling Committee (MIRC) and has been a strategic partner in recycling and sustainable endeavors ever since.

The MSHP has also made use of the surplus property web-based application MOREuse, launched in 2019.

"The MOREuse option has given us an avenue of being able to transfer

equipment to other agencies – helping them save money - and avoid buying new. The MOREuse tool has also made it much easier for agencies to find homes for unwanted property," Chris stated.

While Chris is active in state government, he is also active at home with his family. "I enjoy spending time outdoors camping and fishing. As a family, we enjoy attending sporting events and help coach my daughter's softball team. I've been married to my wife Angela, for 21 years and have a son Blake, who recently graduated from Blair Oaks and a daughter Paige, who is in sixth grade," he said.

Overall, Chris's leadership has allowed the team to accomplish what they have thus far. "The Patrol has great leadership who encourages and supports the recycling efforts at our facilities. It's been a team effort that has gotten us to where we are now. I hope to continue to expand items that can be recycled in the future and appreciate the guidance from the MSRP," Chris stated.

WASTE NOT, WANT NOT - DISCARDED PAINT FINDS NEW LIFE

Have you ever completed a home improvement project and wondered what to do with leftover paint? Did you know it can be recycled and reused? One goal of manufacturing recycled paint is to prevent old paint from showing up at household hazardous waste collections, which can be expensive.

"Paint is one of the most expensive products for local household hazardous waste programs to manage," Lisa McDaniel of the Mid-America Regional Council's Solid Waste Management District (MARC) said. "Supporting the collection of old paint to be made into recycled paint has the potential to relieve local governments and taxpayers of that financial burden while also supporting a vibrant paint recycling system in Missouri."

MARC, along with Missouri Department of Natural Resources, recently partnered on a project to use recycled paint at the



The Missouri State Parks South and Statewide construction crews agreed to provide the needed labor to power wash and paint the warehouse buildings. The project began in May and went well, despite a lot of rain. Daryn Ruble, Missouri State Parks, South Construction Unit, sprays rustic brown paint on the Missouri State Parks Central Warehouse.

Missouri State Parks central warehouse at Lake of the Ozarks. It featured paint donated by recycled paint manufacturers GDB International and Amazon Paint. For

more information about Missouri paint recycling, visit [here](#).



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ROB DIDRIKSEN RETIRES

HONORING ROB'S SERVICE TO THE STATE OF MISSOURI

SEPTEMBER 2022

In 2003, Rob Didriksen became the Missouri State Recycling Program Manager, a role he was hugely passionate about.

Throughout his tenure, Rob has been able to form partnerships with different state agencies and private organizations to assist in better serving state team members. Furthermore, he has embraced change and turbulent markets to shift the program to address current needs.

"From my perspective State Recycling has an amazing story where team members and agencies throughout state government have been able to join together with a common goal of reducing waste and recycling. That common purpose continues to generate economic and environmental benefits. Not only is the program financially self-sustaining, but each year we generate enough revenue to be able to transfer \$30,000 to the Heating Assistance Program managed by the Department of Social Services," Rob said.

One of the most memorable times in the program was when the program became financially self-sufficient during the Great Recession between 2008 and 2009. This was achieved through the sale of scrap materials.

"The most exciting and rewarding project I worked on during my time with State Recycling was the creation of the MOREuse application. Thanks to excellent leadership, team members from Surplus Property, Recycling, and ITSD formed a project team and developed the MOREuse application in 90 days! The MOREuse app has been in use for three years now and continues to generate significant avoided costs for state agencies," Rob said.

The program has benefited from having great management teams along the way.



Missouri State Recycling Manager Rob Didriksen retires after 32 years of public service.

"My management teams have been key to instilling financial discipline and data discipline to ensure the long-term viability of the program," he said.

Rob has made an impact with every partner of the program.

"Rob has been a great asset for me to go to with recycling questions or guidance. He was a backing partner that helped the Highway Patrol acquire a cardboard baler machine when recycling was first implemented here. We appreciate all his guidance he has given to myself and the State Highway Patrol," Missouri State Highway Patrol's Chris Terry said.

"I have valued our collaborations and will miss him as my 'go-to-person' on recycling issues. His wealth of knowledge and experience in state government is golden. He has an amazing work ethic, is thoughtful, encouraging, super-efficient, supportive, and always quick to respond. I wish Rob well and wish him good health in retirement," Department of Natural Resources' Racheal Ajayi said.

"Rob has been an invaluable partner with the Missouri State Agency for Surplus Property. Our goals are intertwined, which has made our agencies very much connected. We have worked together for 18 years and I want to wish you the best of luck and happy retirement," Missouri State Agency for Surplus Property Manager Lee Ann Blythe said.

"Rob has single-handedly changed my views on recycling, utilizing recycled products, and sustainability not just in my work life, but in ways that have spread to my home as well," OA General Services Communications Director Leah Strid said.

"I have learned so much in the past three years working alongside Rob. Our common goals of stewardship and sustainability has created a friendship between us that will last," OA General Services Senior Public Relations Specialist Edward Lang said.

"Rob's positive purpose and energy for the recycling world is contagious. His meaningful contributions and service has benefited the State Recycling Program greatly. I will dearly miss our conversations about sustainability efforts but I am excited to see what awesome endeavours he will take on next," OA General Services Assistant Director of Operations Sylvia Bonner said.

"Rob has served the State of Missouri with passion and integrity and is responsible for the success of our State Recycling Program. It has been an honor to get to know him and we look forward to carrying on his legacy to sustain and build the State Recycling Program into the future! Congratulations, Rob," OA General Services Director and Missouri State Operational Excellence Director Cindy Dixon said.

STATE RECYCLING THROUGH THE YEARS



AMERICA RECYCLES DAY NOV 9-15

America Recycles Day is right around the corner. This year, the Missouri State Recycling Program will be hosting several events to promote the idea of being better stewards of resources. New this year: a statewide MOREuse competition. MOREuse allows the distribution of property from one agency to another for zero cost. Stay tuned for further details.

THE JOURNEY OF PLASTIC BOTTLES

Recycling a plastic bottle uses much less energy and natural resources than manufacturing from new (virgin) materials, so remember to put your used bottles in the recycling container to help give them new life.

The Missouri State Recycling Program assists in the recycling of cans and bottles. Collection containers are placed throughout state office buildings. Once full, they are picked up by the recycling contractor.

Plastic bottles are then transported to a processing facility where they are sorted and baled together. The next step allows for the bottles to be ground up in small chips of plastic known as "flake." These small plastic particles are washed. Certain types of plastics

may need to be separated at this time, which is done by bathing in water. The heavier plastics will sink and the lighter materials will float. Once categorized, the flake is dried.

Melting the plastic allows it to be combined and then cut into pellets, which will enable the plastic to be uniform for easy creation into new products such as new plastic bottles.

Many state offices are equipped with plastic bottle recycling. These bottles are recycled and manufactured into new items.





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2022

RECYCLING CHAMPIONS!

DECEMBER 2022

MISSOURI STATE RECYCLING PROGRAM AWARDS 2022 RECIPIENTS

The Missouri State Recycling Program partners with state team members and agencies to facilitate strategies for reuse and recycling of state property. Each year, we are proud to recognize state agencies and team members for excellence in recycling.

Awards are given during the annual celebration of America Recycles Day in November.

TEAM AWARD **Mighty Movers** DESE

(L-R) David Tramel, Shelley Woods, Marcia Patridge, Bryan Howard, Jake King, Margie Hagenhoff, Amy Halderman, and Michelle Graziano.



In fiscal year 2022 (FY22), the Department of Elementary and Secondary Education (DESE) started the tremendous task of cleaning the basement of the Jefferson Building in preparation for the heating, ventilation, and air conditioning (HVAC) renovation. DESE formed the Mighty Movers team and partnered with the Missouri State Recycling Program for assistance in this project.

Throughout the Jefferson Building Basement Cleanout Project, the Mighty Movers communicated with all DESE team members about coordinated cleanup dates and how materials should be organized. These communications were key to maximizing the amount of material that was ultimately reused or recycled.

INDIVIDUAL AWARD **Jay Mueller**, Missouri Lottery

Jay Mueller was concerned about the volume of cardboard that was being thrown in the dumpster at the Missouri Lottery Distribution Center. Knowing that landfilling recyclable material was bad for the environment, Jay took on the project of setting up a standardized recycling process. Each week, he gathers the cardboard, which is then loaded into a pickup truck. The load of cardboard is taken to New World Recycling to be recycled. Jay is a prime example of team members seeing a need and stepping up to fill in the gap, even if it falls outside of their job responsibilities.

RECYCLING TIPS

Cardboard is recycled in many of our state office buildings, and in fiscal year 2021 (FY21), team members recycled 828,098 pounds of it. In fact, it is one of the most recycled materials in state government.

To improve cardboard collecting and to streamline the process, there are some simple steps that need to be taken.

First, always flatten your cardboard. **Second**, make sure the cardboard is not contaminated with food waste or oils that make the material useless.

These two simple steps will help further our goals of being better stewards of state resources.

Meet Your Recycling Committee Member CASEY ADRIAN

Casey Adrian serves as the Buy Missouri Director and Tourism Liaison for the office of Lieutenant Governor Mike Kehoe. Since May, she has served on the Missouri Interagency Recycling Committee (MIRC).

"I manage the Buy Missouri program for our office, working with many Buy Missouri members and promote the many incredible products they manufacture right here in our state. I also work closely with the Missouri Division of Tourism team, helping to promote our state's many tourism assets. I am often fortunate enough to also get to help out on other projects, such as the Lieutenant Governor's Women of Achievement Awards that were started last year," Casey stated.

Casey is also passionate about recycling and resource stewardship.

"I personally do my best to recycle at home, especially plastics. Being a mom of toddlers, we go through quite a few milk jugs, laundry detergents, etc. It was amazing to me how quickly our plastics would add up, and we are just a family of four! Once I started recycling our plastics at home, it also made me more aware of recycling in other areas of life, including work," Casey said.

Casey's recycling curiosity was sparked



Casey Adrian

even further after receiving an email from the Missouri State Recycling Program detailing what each agency recycled. Casey jumped on board and offered her help within the Lieutenant Governor's office to further the state recycling mission.

"While I knew we were a very small office, I knew that even a small amount of recycling could go a long way," she added.

Casey quickly joined MIRC and made recycling front and center in the office.

"While I have not been a member long, I have learned more about the recycling that is available in the capitol, which is something I have been interested in learning more about. I have also learned more about the MOREuse program as I did not know much about it prior to becoming a member. I think it is a fantastic resource that all state employees should be aware of," she said. "We go through quite a few plastic water bottles in our office, so when I initially reached out to Rob Didriksen, he was able to help us get a larger plastic recycling can that we are now able to keep in our office for all of our plastic recycling needs, which has been great!"

While Casey is avidly involved with work, she also has a family who is as passionate as she is.

"I am a mom to 2.5 year-old twin boys. Most of my time spent outside of work is with my boys and husband; and we really enjoy spending time with our family and friends. We all enjoy spending time outside, especially going to the farm, going camping, and going to the river! My other hobbies include playing volleyball, reading, and attending concerts with my friends," Casey ended.

HOLIDAY LIGHT COLLECTION AT AN OFFICE NEAR YOU

For the past four holiday seasons, the Missouri State Recycling Program and the Department of Natural Resources Hazardous Waste Division, have teamed up to offer an avenue for team members to recycle their old, non-working holiday lights. The list of locations increases each year, which makes it convenient for team members who need to responsibly dispose of the lights.

Copper, glass, and plastic can be recycled from the lights, allowing these precious resources to be manufactured into other items.

Collection locations can be found by scanning the QR code. Bins will be available until January 31.



Lee Ann Blythe and Tammy Anderson, of the Missouri State Agency for Surplus Property, and Stephanie Woodruff of the Missouri State Recycling Program, put the first strand of lights to be recycled in their new collection container.